JC04 Rec'd PCT/PTO 07 JUL 2005

PTO-1390 (Rev. 07-2005)
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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER
13891US
U.S. APPLICATION (It known (Sec 17 CFR 1.5)

INTERNATIONAL APPLICATION NO. PCT/US2004/000556	international filing date 10 Jan 2004 (10.01.2004)	PRIORITY DATE CLAIMED 10 Jan 2003(10.01.2003);	11 Jan 2003(11.01.2003)		
TITLE OF INVENTION					
SPRAY HEAD FOR ELECTROHYDRODYNAN	IIC SPRAY DEVICE AND ELECTROHYDR	ODYNAMIC SPRAYER SYSTEM			
APPLICANT(S) FOR DO/EO/US PIATT, Be JURATOVAC, Joseph A.: ULRICH, Mi			R. Keade;		
Applicant herewith submits to the United S	tates Designated/Elected Office (DO/EO/I	US) the following items and other	nformation:		
1. XX This is a FIRST submission of items of	concerning a submission under 35 U.S.C. 371.				
2. This is a SECOND or SUBSEQUENT	submission of items concerning a submission of	under 35 U.S.C. 371.	·		
3. This is an express request to begin na (5), (6), (9) and (21) indicated below.	tional examination procedures (35 U.S.C. 371)	f)). The submission must include items	;		
4. The US has been elected (Article 31).					
5. XX A copy of the International Application	on as filed (35 U.S.C. 371(c)(2))				
a. is attached hereto (require	ed only if not communicated by the International	l Bureau).			
b. has been communicated b	by the International Bureau.				
c. XX is not required, as the app	lication was filed in the United States Receiving	g Office (RO/US).			
6. An English language translation of the	he International Application as filed (35 U.S.C.	371(c)(2)).			
a. Lis attached hereto.	a. is attached hereto.				
b. has been previously subm	nitted under 35 U.S.C. 154(d)(4).		·		
7. Lx Amendments to the claims of the Int	ternational Application under PCT Article 19 (35	5 U.S.C. 371(c)(3))			
a. are attached hereto (requ	uired only if not communicated by the Internation	onal Bureau).			
b. have been communicated	b. have been communicated by the International Bureau.				
c. have not been made; how	c. have not been made; however, the time limit for making such amendments has NOT expired.				
d. X have not been made and	l will not be made.				
8. An English language translation of t	the amendments to the claims under PCT Artic	le 19 (35 U.S.C. 371(c)(3)).			
9. An oath or declaration of the invento	or(s) (35 U.S.C. 371(c)(4)).				
10. An English language translation of the Article 36 (35 U.S.C. 371(c)(5)).	he annexes of the International Preliminary Exa	amination Report under PCT			
Items 11 to 20 below concern document((s) or information included:				
11. An Information Disclosure Statemen	nt under 37 CFR 1.97 and 1.98.				
12. An assignment document for record	ling. A separate cover sheet in compliance with	37 CFR 3.28 and 3.31 is included.			
13. A preliminary amendment.					
14. An Application Data Sheet under 37	CFR 1.76.				
15. A substitute specification.	A substitute specification.				
16. A power of attorney and/or change of	A power of attorney and/or change of address letter.				
17. A computer-readable form of the sec	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.				
	A second copy of the published International Application under 35 U.S.C. 154(d)(4).				
19. A second copy of the English langua	A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).				

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Page 1 of 3

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U.S. APPLICAT	APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.		PLICATION NO.	ATTORNEY'S DOCKET NUMBER		
10 /5 / 1 6 8 1 PCT/US2004/000556		13891US				
20. Other	PTO-2038 Credit Card Payment Form					
Delegat	ion of Aut	hority fo	r C. Michael Gege	enheimer		
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Invitat	ion <u>to</u> Pay	Addition	al Fees plus Anno pplicant/Invento	ex	or Pula Othic	
Kequest The follo	TO IB TO pwing fees have b	COTTECT A	pplicant/Invento	s Name und	CALCULATIONS	PTO USE ONLY
					\$ 300.00	
22. ₹ 7 Exam	nination fee (37 CF	R 1.492(c))			300.00	
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by IPEA/	US indicates all cl	aims satisfy provi	mational preliminary examinati isions of PCT Article 33(1)-(4).	\$0 `	\$ 200.00	
	ns			\$200		
23. A Sear	rch fee (37 CFR 1.	492(b))				
IPEA/UŞ	indicates all claim	is satisfy provisio	nal preliminary examination repons of PCT Article 33(1)-(4)	\$0	s 500.00	
			he international application to		\$ 500.00	
International Sea	rch Report prepar	ed by an ISA oth	er than the US and provided to	the Office or		
			3			
All other situations\$500 TOTAL OF 21, 22 and 23 =			1,000.00			
☐ Additional fe	e for specification	and drawings file	ed in paper over 100 sheets (ex	cluding		
sequence electronic	e listing in complia c medium) (37 CF	ince with 37 CFR R 1.492(ii).	1.821(c) or (e) or computer pr	ogram listing in an		
The fee is	\$250 for each ad	ditional 50 sheet	s of paper or fraction thereof.	T		
Total Sheets	Extra Sheets	Number of each	additional 50 or fraction	RATE		
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			ch fee, examination fee, or the	oath or declaration	\$	
after the date of commencement of the national stage (37 CFR 1.492(h)). CLAIMS NUMBER FILED NUMBER EXTRA RATE		\$				
Total claims		- 20 =	6	× \$ 50	\$ 300.00	
Independent clair		-3=		× \$200	\$ 500.00	
<u> </u>			0	·	\$ \$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360 TOTAL OF ABOVE CALCULATIONS =				\$ 1,300.00	 	
K Applicant da	ims small entity st	tatus. See 37 CF	R 1.27. Fees above are reduc		\$ 1,500.00	
	Ornali Orlaty St			SUBTOTAL =	\$ 650.00	
Processing fee o	f \$130 00 for firm	shing the English	translation later than 30 mont		050.00	l
	late (37 CFR 1.49	-	i danisiation later diam 30 mont	+	\$	
			TOTAL	NATIONAL FEE =	\$ 650.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +		\$				
TOTAL FEES ENCLOSED =			\$ 650.00			
					Amount to be refunded:	\$
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d. XX	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND A	LL CORRESPONDENCE TO:		2) and and land		
c.	Michael Gegenheimer, Esq.		SIGNATURE		
	ttelle Memorial Institute		C. Michael Gegenheimer		
	95 King Avenue Dlumbus, Ohio 43201-2693		NAME 33,387		
Un	nited States of America		REGISTRATION NUMBER		
			REGISTRATION NUMBER		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE DO/EO/US CONCERNING SUBMISSION UNDER 35 U.S.C. 371

In re U.S. Nationa PCT/US2004/000	-)	
Inventors:	Piatt, Beverly A. et al.) File No:	13891US
Intl. Filing Date:	10 Jan 2004)) Date [.]	July 7, 2005
For: SPRAY HEAD FOR ELECTROHYDRODYNAMIC SPRAY DEVICE AND ELECTROHYDRODYNAMIC SPRAYER SYSTEM)))	July 7, 2000

CERTIFICATE OF MAILING

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

The undersigned hereby certifies that the attached:

Item	No. of Sheets
PTO-1390 Transmittal Letter to DO/EO/US Concerning Submission	6
under 35 U.S.C. 371 (in duplicate)	
PTO-2038 Credit Card Payment Form	1
Delegation of Authority to C. Michael Gegenheimer	1
PCT/ISA/220 Notification of Transmittal of Intl. Search Report and	2
Written Opinion;	
PCT/ISA/210 International Search Report and cited references	45
PCT/ISA/237 Written Opinion of the ISA	8
PCT/ISA/206 Invitation to Pay Additional Fees plus Annex	8
Request to IB to Correct Applicant/Inventors' Name under Rule 92bis	1
Return Receipt Postcard	1

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in an envelope addressed to the Commissioner for Patents, Mail Stop PCT, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date set forth below.

<u>Ydrenda Ydlock Hoone</u> Signature

July 7, 2005

Date of Deposit

Brenda Block Koone Battelle Memorial Institute 505 King Avenue Columbus, Ohio 43201-2693 (614) 424-3298 phone (614) 424-3864 facsimile kooneb@battelle.org